09/24/99

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

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Our Docket No: HTT-9901

Date: Fri, Sep 24, 1999

09/406001 09/406001 09/24/99

The Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

Dear Sir:

Transmitted herewith for filing is the patent application of

Inventor(s): HIATT

Title: SYSTEM FOR TRANSFERRING AN ADDRESS LIST AND METHOD

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| <u> </u> | sheets of informal drawings, along with | 16 pages of specification and claims, and a Declaration |
|----------|---|---|
| | Combined with a Power of Attorney. | |

- ___ An assignment transmittal letter with Assignment of the invention to______
- X A verified statement to establish Small Entity status under 37 CFR 1.9 and 37 CFR 1.27.
- _x A List of References.
- _x The filing fee is calculated below:

CLAIMS AS FILED

| | NUMBER OF CLAIMS | NUMBER EXTRA | RATE | FEE |
|--------------------|---------------------|-----------------|--------|------------|
| TOTAL CLAIMS | 20- 20 = | 0 | X \$9 | = \$ 0.00 |
| INDEPENDENT CLAIMS | 3-3= | 0 | X \$39 | = \$ 0.00 |
| | = \$ 0.00 | | | |
| | = \$ 380.00 | | | |
| TOTAL FILING FEE | | | | = \$380.00 |

- X A check in the amount of the total filing fee.
- Please forward all correspondence to:

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Attorney for Applicants Registration No. 38,170 (719) Phone: 447-1990

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS:

Dale Hiatt

CASE NO .:

HTT-9901

ENTITLED:

SYSTEM FOR TRANSFERRING AN ADDRESS LIST AND METHOD

Law Offices of Dale B. Halling 128 S. Tejon, Suite 202 Colorado Springs, CO 80903 September 20, 1999

ept 20/999

VERIFIED STATEMENT CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(c) AND 1.27 (C)) - INDEPENDENT INVENTOR

As the below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under Section 41(a) and (b) of Title 35 United States Code, to the Patent and Trademark Office with regard to my above-identified invention described in the specification filed herewith. I have not assigned, granted, conveyed, or licensed-and am under no obligation under any contract or law to assign, grant, convey, or license-any rights in the invention to either (a) any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or (b) any concern which would not qualify as either (i) a small business concern under 37 CFR 1.9(d) or (ii) a nonprofit organization under 37 CFR 1.9(e).

I am under no obligation to assign, grant, convey or license any rights in the invention to any person, concern or organization.

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28 (b))

I hereby declare that all statements made herein of my own knowledge are true and that all statement made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statement and the like so made are punishable be fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Dale Hiatt

SYSTEM FOR TRANSFERRING AN ADDRESS LIST AND METHOD

Field of the Invention

The present invention relates generally to the field of communications and more particularly to a system for transferring an address list and method.

Background of the Invention

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Personal communication devices such as cellular (PCS - Personal Communication Systems) telephones, pagers and PDAs (Personal Digital Assistants) have become very popular. These devices store address information such as names, telephone numbers and email address. Unfortunately, most of these devices have no way to share this information with other devices, such as personal computers that contain address databases. Large companies often have centralized address databases of their clients. A salesman who is new to the company or takes over a new territory has to enter the address information manually.

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Some PDAs do have an infra-red communication link that allows them to share information with a personal computer. This requires that the user be within line of sight in order to establish the communication

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link. It also does not allow the user to communicate with a centralized server.

Thus there exists a need for a system that transfers an address list between any computer and personal communication device or between personal communication devices. The system should allow the user to initiate the transfer from anywhere the personal communication device is able to obtain normal communication coverage.

Brief Description of the Drawings

- FIG. 1 is a schematic diagram of a system for transferring an address list in accordance with one embodiment of the invention;
- FIG. 2 is a schematic diagram of a system for transferring an address list in accordance with one embodiment of the invention;
- FIG. 3 is a block diagram of a software-communications protocol stack in accordance with one embodiment of the invention;
- FIG. 4 is a call flow chart of the process in setting up a communication link to transfer an address list in accordance with one embodiment of the invention; and
- FIG. 5 is a flow chart of the steps used in a method of transferring an address list in accordance with one embodiment of the invention.

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Detailed Description of the Drawings

A system for transferring an address list includes a portable wireless electronic device. A wireless communication system is capable of establishing a wireless communication link with the portable wireless electronic device. A wireline communication network is connected to the wireless communication system. A computer is connected to the wireline communication network. The computer contains an address software that sends a plurality of addresses to the portable wireless electronic device. This system allows a user to receive an address list wherever the portable wireless electronic device can obtain wireless coverage. The system is also capable of sending the address list from the portable wireless electronic device to the computer.

FIG. 1 is a schematic diagram of a system 10 for transferring an address list in accordance with one embodiment of the invention. A portable wireless electronic device 12 has a wireless communication link 14 with a wireless communication system 16. The wireless communication system 16 is connected to a wireline communication system 18. A computer 20 is connected to the wireline communication system 18. The computer 20 runs an address software that is capable of sending a plurality of addresses (or a single address) to the portable wireless electronic device 12. In addition the address software can be used to receive addresses from the portable wireless electronic device 12.

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FIG. 2 is a schematic diagram of a system 50 for transferring an address list in accordance with one embodiment of the invention. A portable wireless device, such as a cellular (PSC) telephone 52, PDA (Personal Digital Assistant) 54, portable computer 56 or pager, has a wireless connection 58 to a base station 60. The base station 60 is part of a wireless communication system, such as a cellular (PCS) network, a pager network, or a wireless computer/PDA network. The base station 60 is connected to the public switched telephone network (PSTN) 62. In one embodiment, the PSTN 62 connects directly to a modem of a computer 64. In another embodiment, the PSTN 62 connects to a LAN (Local Area Network) that is connected to the computer 64.

In one embodiment the PSTN 62 connects to an ISP (internet service provider) 66. The ISP 66 provides access to the internet 68. A second ISP 70 is connected to the modem of the computer 64. In another embodiment the internet 68 is connected to a server 72. The server is connected to the computer 64 by a LAN 74.

A user operates the system by selecting an address program on his portable wireless electronic device 52, 54, 56. The program asks him for an electronic address, such as the telephone number of the modem of the computer 64 or the telephone number of his ISP 66 and the URL (universal resource locator) of the computer 64. Note in one embodiment, the server 72 is the main repository of the address lists. In this case the user would enter a URL of the server 72. When the user enters the telephone number of the modem of the computer 64, the portable electronic device establishes a wireless connection with the base station 60. The base station establishes a connection with the

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computer 64 through the PSTN 64. The user then selects an address file to upload (download). In one embodiment, the user can select a plurality of fields for transfer. For instance, a user may only want the names and telephone numbers for his cellular phone even though the computer's addresses includes street addresses and email addresses.

Alternatively the user can connect to the computer 64 or server 72 as if he were connected to a world wide web (WWW) site. In this case the user would establish a connection to his ISP 66 and then enter a URL of the server 72 (computer). The server 72 would respond with a web page that included choices such as upload-download, file, fields and selected entries. The users input would be similar to a standard web page with hyperlinks. In this case a digital personal communication system protocol used for the connection 58 would encapsulate a wide area network protocol, such as an internet protocol. Note other wide area network protocols are also contemplated by the invention. The internet protocol would encapsulate a HTML (hyper text markup language - hypertext protocol) protocol.

In another embodiment the user sends an email with his request to his ISP. The computer 64 downloads the email and executes the address transfer program based on the information in the email. The response is sent via email to the user. The user's electronic device downloads the response and updates the address file. In this case the digital personal communication system protocol would encapsulate the internet protocol and the internet protocol would encapsulate the SMTP (Simple Mail Transfer Protocol). Note that other electronic mail protocols could also be used.

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The system can also be setup so that there is a transfer between portable wireless electronic devices. In this case the wireless communication system would establish a connection between the two portable wireless electronic devices. This connection may go through the PSTN 62.

In another embodiment the user wants to send updated files from his portable wireless electronic device 52, 54, 56 to his personal computer 64 (or server 72). In this case the user pulls up his address program and selects upload or transfer to computer option. The communication system works similarly to the examples shown above. Note that the address program includes an updated time stamp. The date stamps of two similar records are compared and the transferred address is only stored if its date stamp is newer than the record already in the file. As a result only new information is stored.

FIG. 3 is a block diagram of a software-communications protocol stack in accordance with one embodiment of the invention. A portable wireless electronic device 90 has an address transfer program 92. The address transfer program 92 is an application program that communicates with a HTTP (hyper text transfer protocol) layer 94. Note in one embodiment the application program communicates with a SMPT layer. The HTTP layer 94 communicates with a TCP/IP (transmission control protocol/ internet protocol) layer 96. The HTTP protocol "packets" are encapsulated into the TCP/IP "packets." The TCP/IP layer 96 communicates with a PCS (personal communication System) protocol 98. The PCS protocol frames encapsulate the TCP/IP "packets" (datagrams). The PCS protocol establishes a communication (wireless)

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link 100 with a PCS layer 102 near the computer 104. The PCS layer strips out the PCS protocol layer overhead. The PCS layer passes the TCP/IP datagrams to a TCP/IP layer 106 of the computer 104. Note in one embodiment a PSTN protocol is used between the PCS layer 102 and the TCP/IP layer 106. The TCP/IP layer 106 strips out the TCP/IP overhead information and passes along a HTTP "packet." The HTTP layer 108 strips out the HTTP overhead and passes along the information cargo to the address program 110. This process is reversed for information passing in the opposite direction.

FIG. 4 is a call flow chart of the process in setting up a communication link to transfer an address list in accordance with one embodiment of the invention. A portable wireless electronic device 120 requests service 122 from a wireless system 124. The wireless system 124 responds with an acknowledge 126 when the wireless system 124 has enough capacity. The portable electronic device 120 then sends an electronic address 128 to the wireless system 124. The wireless system 124 recognizes that it requires the assistance of a wired system 130 to complete the connection to the computer 132. The wireless system sends a request for service 134 to the wired system 130. The wired system 130 responds with an acknowledge 136 when it has sufficient capacity to complete the connection. The wired system 130 then forwards an electronic address 138 to the computer 132. The computer responds with an acknowledge 140 to the portable electronic device 120. The portable electronic device 120 sends a request address database access message 142. The computer 132 responds with setup information 144, such as available files (personal, work). The user then selects a file

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and the device 120 sends a request file 146 to the computer 132. The computer 132 then forwards the file 148 to the portable electronic device 120. Once the file has been received the portable electronic device sends an end message 150. The computer 132 responds with an end message 152. The connection is then torn down 154. Note that this call flow is representative of an address list transfer call flow, however many other call flows are possible. The invention is not limited to any particular call flow.

FIG. 5 is a flow chart of the steps used in a method of transferring an address list in accordance with one embodiment of the invention. The process starts, step 170, by selecting an address transfer program at a first electronic device at step 172. An electronic address of a second electronic device is entered at step 174. A communication path between the first electronic device and the second electronic device at step 176, the communication path includes a wireless portion and a wired portion. At step 178 the plurality of addresses are transferred which ends the process at step 180. In one embodiment the plurality of addresses are transferred from the second electronic device to the first electronic device. In another embodiment, the plurality of addresses are transferred from the first electronic device to the second electronic device.

In one embodiment the user selects a file of addresses. For instance, the user could select personal addresses, business addresses or from another file. In one embodiment the user selects a field in the file of addresses. A field is the name, street addresses, etc. A user

downloading addresses to his cellular phone may only want to select the name field and telephone number field.

In one embodiment the electronic address is a telephone number.

In another embodiment the electronic address is an email address or URL.

In one embodiment the invention is implemented as a computer-readable program containing computer readable instructions. The program when implemented displays an address transfer option. The program then requests an electronic address of an electronic device. The program then directs that a communication link with the electronic device be established through a communication network. The program then receives a plurality of addresses. In one embodiment the user selects a file of addresses to receive. In another embodiment the user selects a field in the file of addresses.

Thus there has been described a system and method of transferring an address list between any computer and personal communication device or between personal communication devices. The system also allows the user to initiate the transfer from anywhere the personal communication device is able to obtain normal communication coverage.

While the invention has been described in conjunction with specific embodiments thereof, it is evident that many alterations, modifications, and variations will be apparent to those skilled in the art in light of the foregoing description. Accordingly, it is intended to embrace all such alterations, modifications, and variations in the appended claims.

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Claims

What is claimed is:

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- 1. A system for transferring an address list, comprising:
- a portable wireless electronic device;
- a wireless communication system capable of establishing a wireless communication link with the portable wireless electronic device;
- a wireline communication network connected to the wireless communication system; and
- a computer connected to the wireline communication network, the computer containing an address software that is capable of sending a plurality of addresses to the portable wireless electronic device.
- 2. The system of claim 1, wherein the portable wireless electronic device is a cellular telephone.
- 3. The system of claim 2, wherein the wireless communication link is a digital personal communication system protocol that encapsulates a wide area network protocol.

- 4. The system of claim 2, wherein the internet protocol encapsulates a hypertext protocol.
- 5. The system of claim 2, wherein the internet protocol encapsulates an electronic mail protocol.
 - 6. The system of claim 2, wherein the cellular telephone contains an address transfer program.
 - 7. The system of claim 6, wherein the address transfer program requests a telephone number for a transfer.
 - 8. The system of claim 7, wherein the address transfer program requests a file name for the transfer.
- 9. The system of claim 7, wherein the address transfer program allows a user to select a plurality of address fields for the transfer.

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- 10. A method of transferring an address list, comprising the steps of:
- (a) selecting an address transfer program at a first electronic device;
 - (b) entering an electronic address of a second electronic device;
- (c) setting up a communication path between the first electronic device and the second electronic device, the communication path including a wireless portion and a wired portion; and
 - (d) transferring an addresses.
- 11. The method of claim 10, wherein step (d) further includes the step of:
- (d1) transferring the plurality of addresses from the second electronic device to the first electronic device.
- 12. The method of claim 10, wherein step (d) further includes the step of:
 - (d1) transferring the plurality of addresses from the first electronic device to the second electronic device.

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- 13. The method of claim 10, wherein step (a) further includes the step of:
 - (a1) selecting a file of addresses.

14. The method of claim 10, wherein step (a) further includes the step of:

- (a1) selecting a field in the file of addresses.
- 15. The method of claim 10, wherein step (b) further includes the step of:
 - (b1) entering a universal resource locator.
- 16. The method of claim 10, wherein step (b) further includes the step of:
 - (b1) entering a telephone number.
- 17. The method of claim 10, wherein step (b) further includes the step of:
 - (b1) entering an email address.

18. A computer-readable program containing computer-readable instructions that when executed by a computer performs the following steps:

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- (a) displaying an address transfer option;
- (b) requesting an electronic address of an electronic device, when the address transfer option is selected;
- (c) establishing a communication link with the electronic device through a communication network; and
 - (d) receiving a plurality of addresses.
- 19. The computer-readable program of claim 18, wherein step (b) further includes the steps of:

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(b1) selecting a file of addresses.

20. The computer-readable program of claim 18, wherein step (b) further includes the steps of:

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(b1) selecting a field of the file of addresses.

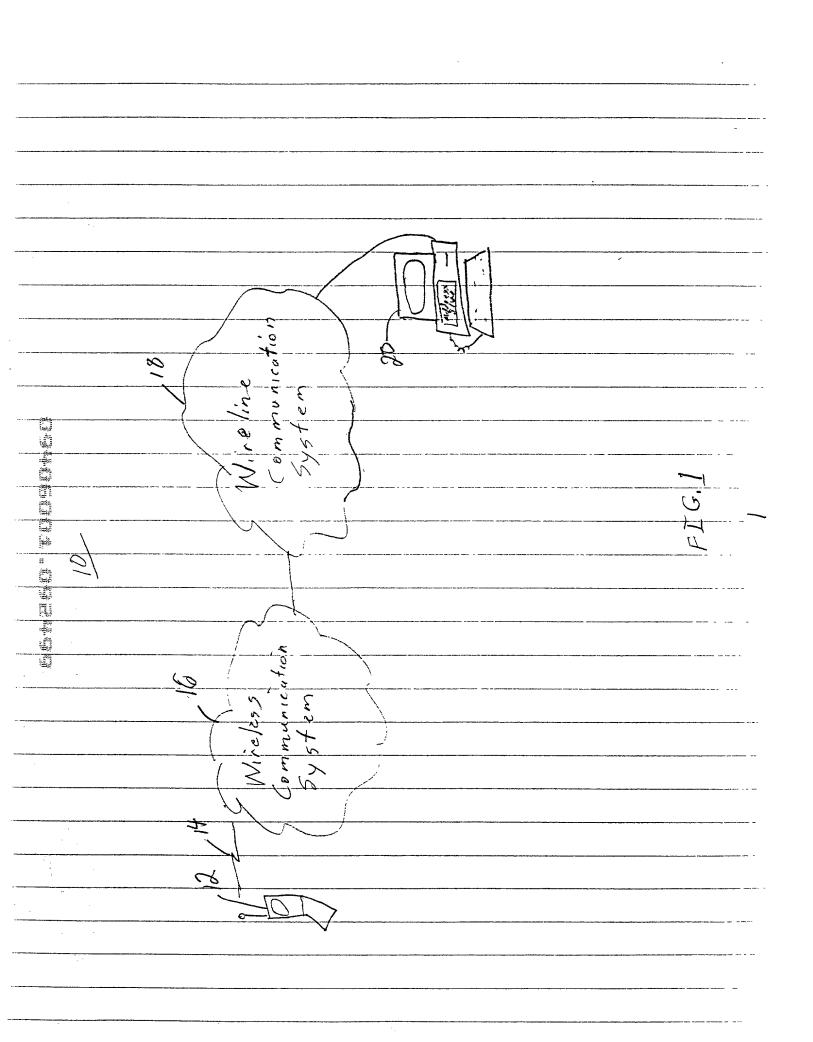
SYSTEM FOR TRANSFERRING AN ADDRESS LIST AND METHOD

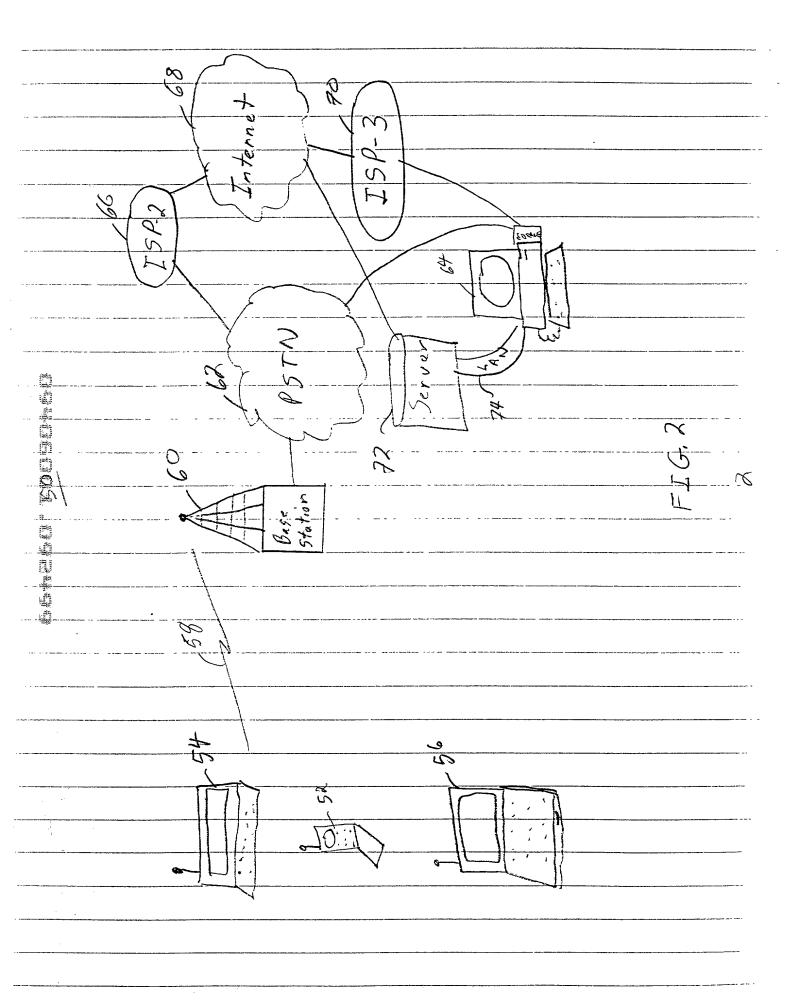
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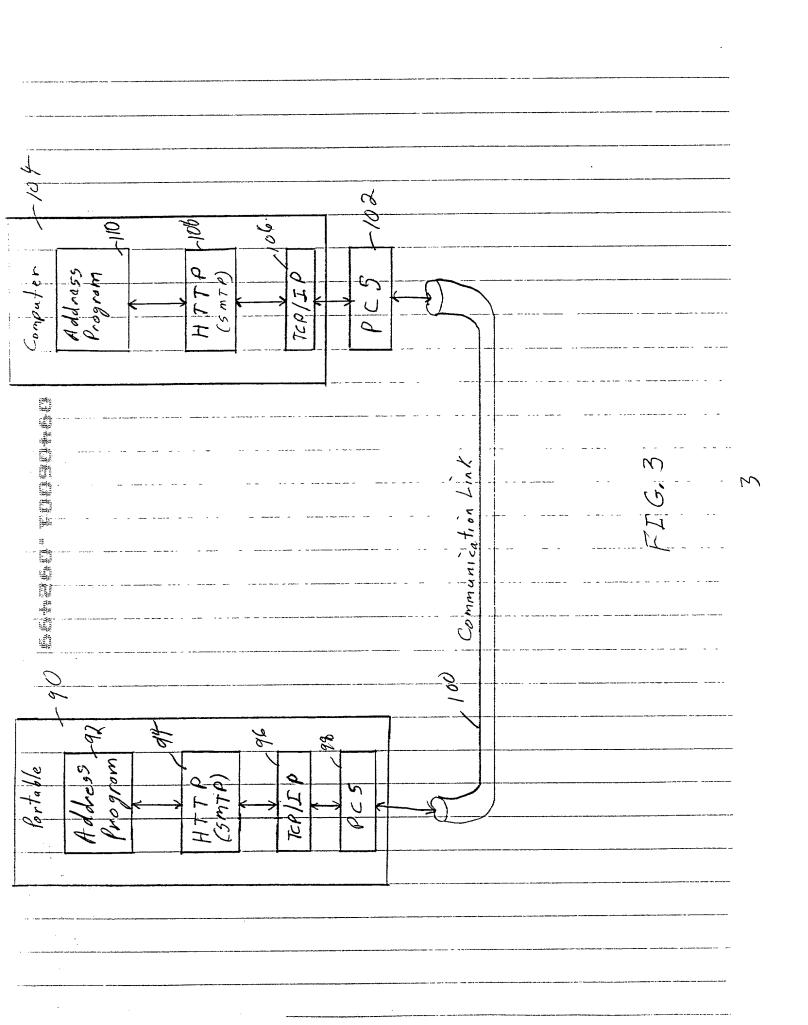
Abstract of the Disclosure

A system (10) for transferring an address list includes a portable wireless electronic device (12). A wireless communication system (16) is capable of establishing a wireless communication link (14) with the portable wireless electronic device (12). A wireline communication network (18) is connected to the wireless communication system (16). A computer (20) is connected to the wireline communication network (18). The computer (20) contains an address software that sends a plurality of addresses to the portable wireless electronic device (12).

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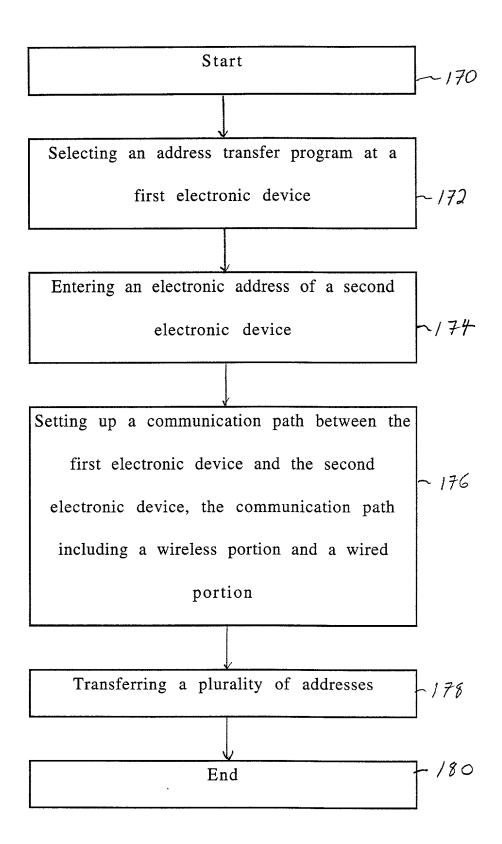


FIG. 5

PATENT APPLICATION DECLARATION COMBINED WITH POWER OF ATTORNEY

X REGULAR (UTILITY) OR ____ DESIGN APPLICATION (check one)

| • | No. HTT-9901 |
|--|---|
| As a below-named inventor, I hereby declare that: | |
| My residence, post office address and citizenship are as stated by | pelow next to my name. |
| I believe I am the original, first and sole inventor (if only one name inventor (if plural names are listed below) of the subject matter who sought on the invention entitled: SYSTEM FOR TRANSFE | hich is claimed and for which a patent is |

Attorney Docket

(if applicable)

I believe I am the original, first and sole inventor (if only one name is list inventor (if plural names are listed below) of the subject matter which is sought on the invention entitled: SYSTEM FOR TRANSFERRING the specification of which: X is attached hereto. (check one) was filed on U.S. Application Serial No. and was amended on ____

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s):

| (check one) | X no such ap | Priority <u>Claimed</u> | | |
|----------------|--------------|----------------------------|-----|----|
| (Serial No.) | (Country) | (Day/Month/Year Filed) | Yes | No |
| (Serial No.) | (Country) | (Day/Month/Year Filed) | Yes | No |
| (Serial No.) | (Country) | (Day/Month/Year Filed) | Yes | No |

I hereby claim the priority benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a) which is material to the examination of this application and which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

| Prior U.S. Applications(s) |): | | | | |
|--|---|--|--|--|--|
| (check one) | | X no such applications filed. | | | |
| | such application | ons identified as follows: | | | |
| (Application Serial No.) | (Filing Date) | (Status) (Patented, Pending, Abandoned) | | | |
| (Application Serial No.) | (Filing Date) | (Status) (Patented, Pending, Abandoned) | | | |
| (Application Serial No.) | (Filing Date) | (Status) (Patented, Pending, Abandoned) | | | |
| application is not disclose paragraph of Title 35, Uni information as defined in examination of this applic | ed in the prior United States ited States Code, Section 1 Title 37, Code of Federal R | r as the subject matter of each of the claims of this application in the manner provided by the first 112, I acknowledge the duty to disclose material Regulations, Section 1.56(a) which is material to the petween the filing date of the prior application and the ation: | | | |
| Prior Provisional U.S. App | plications(s): | | | | |
| (check one) | no such application | cations filed. ons identified as follows: | | | |
| 60/122,483 (Application Serial No.) | | - | | | |

I hereby declare that: as to any claimed subject matter of this application which is common to my earlier United States or foreign application(s), if any, which I have identified above and claimed the benefit of priority thereof, I do not believe that the same was ever known or used in the United States before my invention thereof or patented or described in any printed publication in any country before my invention thereof or more than one year prior to the first of said earlier application(s), or in public use or on sale in the United States more than one year prior to the first of said earlier application(s), and that the said common subject matter has not been patented or made the subject of an inventor's certificate before the date of the first of said earlier U.S. application(s) in any country foreign to the United States on an application, filed by me or my legal representatives or assigns more than twelve months (six months if the present application is a Design patent application) prior to the first of said earlier U.S. application(s), if any; and that, as to any claimed subject matter of this application which is not common to said earlier application(s), if any, I do not know and do not believe that the same was ever known or used in the United States before my invention thereof or patented or described in any printed publication in any country before my invention thereof or more than one year prior to the date of this application, or in public use or on sale in the United States more than one year prior to the date of this application, and that said subject matter has not been patented or made the subject of an inventor's certificate in any country foreign to the United States on an application filed by me or my legal representatives or assigns more than twelve months (six months if the present application is a Design patent application) prior to the date of this application.

| I HEREBY APPOINT THE FOLLOWING AS MY ATTORNEY(S) OR AGENT(S) WITH FULL POWER OF SUBSTITUTION TO PROSECUTE THIS APPLICATION AND TRANSACT ALL BUSINESS IN THE PATENT AND TRADEMARK OFFICE CONNECTED THEREWITH: | | | | | |
|--|------------------------|--------------------------------------|--|--|--|
| NAME(S) | REGISTRATION NO.(S) | ASSOCIATE POWER OF ATTORNEY ATTACHED | | | |
| Dale B. Halling | 38,170 | Yes No | | | |

Send Written Correspondence To:

Law Offices of Dale B. Halling 128 S. Tejon, Ste 202 Colorado Springs, CO 80903

Direct Telephone Calls to: (719) 447-1990

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statement and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| Full name of | | | | |
|------------------------|-------------------|--|----------|--|
| first inventor | Aden Dale Hi | att, Jr. | | |
| Inventor's signature _ | aden a | ry Night ? | | |
| Date | 20, 1999 | / / | | |
| Residence | Colorado Springs. | CO USA | | |
| | City | State or Foreign | Country | |
| Citizenship | US | | | |
| Post Office Address _ | 3265 El Po | mar Rd. | | |
| | | Street Address | | |
| | Colorado Springs | CO | 80906 | |
| | City | State or Country | Zip Code | |
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